مجانا وحصريا

حمل الان

المراجعة رقم (1)









Topic one: An introduction to the project

What is meant by Atlas?

A way to explore the world through a book display geographic maps, and related to a specific topic like continents and countries. Examples of such Atlas: World Atlas, Atlas of Africa,

Multimedia

The term (multimedia) is composed of two parts: the first part is (Multi) and means multiplicity, and the second part is (Media) and it means media carrying different information such as (audio, image and video)

Advantages of Multimedia in Education

1-Saving the time and effort for both teacher and learner.
2-Making learning process enjoyable and interesting.
3-Grabbing attention of information presented, which facilitate understanding.
4-Providing a diversity of methods to display information which stimulate audio-visual senses.

Multimedia Elements

- 1. Data or Information
- 2. Hardware
- 3. Software

Problem solving stages

You may face some problems during the execution of project's stages.

1- Problem Definition:
Define the problem, required output and available inputs as an overview.

2- Determine the Outputs:
The outputs are the important information and results obtained after solving the problem.

3- Determine the Inputs:
The inputs are data available that can be obtained from several resources, such as books, encyclopedias and the Internet, etc., and these data will be processed to obtain the required output.

4- Develop an Algorithm:
We set a logical sequence of steps; these steps are called (Algorithm).
To illustrate this sequence of steps; many tools can be used the (Flowchart) is one of them.

5- Computer Coding:
We have already planned for solving the problem, when using computer we have to translate the steps of solving problem; into an application using one of the programming language.

6- Program Testing and debugging:
The aim of this phase is the implementation of the code that has been written, then testing this code using diverse values (input), displaying the results (output), and then making the necessary corrections in case of errors.

7- Program or Project Documentation:
You can document the program or project by doing the following:
- Write the goal of the project ("programming project"), name of the programmer, creation date and the software version number.
- Save program or project in the appropriate storage media.
- Print program or project and keep the printed papers within a folder in a safe place.
- Add Help or a guide for using program or project.
- You can make an executable (EXE) version of the program or project; so that it runs directly through the operating system.

Topic Two: Managing Projects data

Create (Folder- File)

Right-Clicking with the mouse in free place on the Desktop, opens a shortcut menu; from which you choose the command New then Folder and then type the name of the folder; so a new folder is created with the name you specified

Naming (Folder- File)

Select a folder; and display its shortcut menu from which; choose the command Rename; to give a new name to the specified folder

Delete (Folder- File)

Select a folder; and display its shortcut menu from which; choose the command Delete; to delete the specified folder.

Search through the Internet:

search of information is done by using keywords.
There are many internet sites that offer search services, called Search Engines.

Search Engines:

- There are many famous Search Engines:
- - Search Engine www.google.com
- -Yahoo Search Engine www.yahoo.com

Download the file (voice- video- image)

We can use the Internet to search for these files and save them on the computer.

Importance of encyclopedia

- -It provides an overview of one of the topics and the facts accompanied with articles, tables, images, forms, maps and bibliographic sources.

-Encyclopedias are characterized by the diversity and huge amount of different types of information displayed, and the easiness of searching and quick access.

Search inside electronic encyclopedia

- Encyclopedia is a distinct type of reference that shows a structured summary of knowledge in a particular field, and is arranged in accordance with a certain classification; that facilitates searching of required information such as:
- (Text- picture-Sound-Videos) alphabetic order.

Among the most important encyclopedias the Wikipedia
http://en.wikipedia.org/wiki/Main_Page
http://ar.wikipedia.org/wiki/

Organizing encyclopedias

There are two ways to organize information contained in encyclopedias:

- 1- Sorting by alphabet.
- 2- Sorting by scientific classification or by topics.

Topic Three: Collecting Project's data using Spreadsheets applications

What are Spreadsheets?

A spreadsheet is a workbook made up of many different worksheets or spreadsheets.
A spreadsheet consists of columns and rows; it is made up of cells.
A cell is the intersection of each row and column.

Columns

The columns headers are identified by alphabet letters: 'ABC,…'.
These letters are used to specify the location of each column.

Rows

The rows headers are identified by numbers: '1,2,3,…..'. these numbers are used to specify the location of each row.



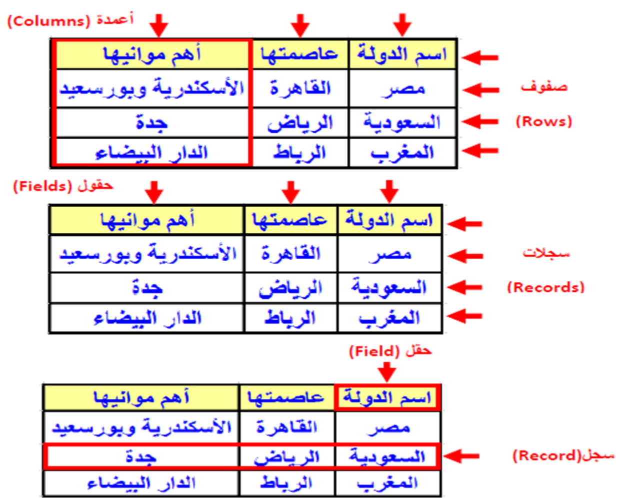
The number of worksheet columns and rows vary according to the Spreadsheet application version.

What are the types of data that can be located in a cell?

- Text data (letters or texts)
- Numeric data (numbers)
- Formulas (mathematical formulas).

The Table is formed of:

Each Row represents a Record, and each Column represents a Field, and each Field contains Data.



Topic four: Edit and design images

Image-editing software

Image-editing software is program that enables a user to create and edit pictures through many tools in a good, easy and fast way There are many programs that you can use for doing specific task as editing pictures, some of them are:

CinePaint (O/S Linux) - PicsArt (O/S Android) - Paint.NET (O/S Windows)

There are several Types of image files that have different extensions like:

Bmp - gif – eps -jpg - pcx – png - wmf - tif - ..etc.

pictures are divided into two main types according to its processing inside the computer:

	vector	Raster
Based on	mathematical expressions	dot matrix data structure
Scaling	not affected by scaling	affected by scaling
Quality	image scaling doesn't reduce picture quality	image scaling reduce picture quality
Size	small storage size	large storage size

The Characteristics of some pictures types

Extension		
Raw	- can't support the animated picture and its transparency	- size of the picture is very big . - high quality compared with jpg.
Gif	- It is inadvisable to use it in saving pictures of high number of colors and gradients colors; in order not to be distorted	- supports animation and transparency - small sizes. This extension is an abbreviation of (Graphical Interchange Format

Bmp	- It is a type of fixed picture files that support neither transparency nor animation,	- big size and high quality and high colors compared with gif. The .bmp extension is an abbreviation of (Bitmap).
Jpeg	- doesn't support neither animation nor transparency,	- one of the most famous and widely used types compared with others; where the team of (Joint Photographic Experts Group) has developed it, - This type has other extensions: jpe and jpg. - Digital cameras support it - it has 16 million colors.
Png	- doesn't support animation	- supports transparency - This extension is an abbreviation of (Portable Network Graphics).
Wmf	- doesn't support animation	- supports transparency - based on mathematical expressions - not affected by scaling - scaling doesn't reduce picture quality - small storage size - This extension is abbreviation of (Windows Meta File).

Notes:

- All of these types of pictures are fixed except for gif type. It can be fixed and animated pictures.
- Bmp , jpg , gif , png , wmf are types of pictures that you can use in Visual Basics.net application.
- There are many Applications Programs that manipulate different types of pictures according to its kind and its potentiality. Some programs enable you to convert from a picture type to another.
- The picture file type "bmp" can be used with many operating systems.

Editing Picture

Set Picture size.

To set picture size is to change the dimensions of a picture (height-width) through the following steps:

- Download one of Image editing programs.
- Open Arab Republic of Egypt Picture Map file from folder Maps inside the Folder Atlas.
- Change the size of the Map to suit the allocated area in the project, When you activate the picture, you find 8 points, through which you can change the dimensions of the picture.

Add effects to pictures.

From "adjustment" choose between "border – shadow – black and white"

Crop out part of the picture.

Sometimes we want to cut a certain part of the picture or delete some parts. In the picture map of "Arab Republic of Egypt", to cut part of it for example the capital, Cairo, we use the cut tool (CROP) from the toolbar of the Image editing program.



Saving a picture inside a file with a suitable extension:

After making the required modifications to the picture, save it with file name and with extension “gif” and saved it with the extension “jpg “inside the subfolder Maps in the main folder Atlas.

Animated picture

An animated picture is a collection of pictures that you have to insert one after the other in frames, inside a timeline. You adjust the interval between each frame; so that the pictures appear to be moving.

Topic Five: Creating and manipulating Sound files

Audio files

There are many audio files formats (extensions) such as: wav, wma, mp3.

The following identify the famous audio types.

Wav type:

Wave file format is of high quality, and often used to store information about uncompressed raw audio data. (Original sound, which has not gone through any file format, however, due to the amount of disk space that these files take up it, is not common to be published or posted on Web sites. WAV files are universal, they can be utilized on many operating systems, and modified (compressed and converted to other file type of small size but with low quality) by many Audio editing programs, and WAV means (Wave form audio).

Wma type:

This type is the higher quality and lower distortions type compared to .MP3 file, only few audio editing software and operating systems can support editing and manipulating (.wma) file format knowing that .WMA files stands for (Windows Media Audio).

Mp3 type: (small size, low quality compared to WAV)

MP3 does not have nearly the same amount of quality as WAV file format, the MP3 format uses compression which actually save space and make the file smaller, it is not suitable for retaining "first generation" archived files.

In VB.net language, you can insert the appropriate controls in the (Toolbox) to play different types of Audio files.

Comparison	Filename.wav	Filename.mp3
Storage Capacity	Bigger Size	Smaller Size
The quality of the sound purity	High Quality	Low Quality

Audio editing software

Audio editing software are programs that include a collection of powerful tools to generate sounds, add audio effects, recording, editing and performing other audio processing that enable user to edit and process audio files in a great way, quick and easy. There are several programs that can be used for creating and editing audio files; cut large audio files, into parts, merge and editing them; some of them are:

- **(Audacity) (O/S Windows- Linux)**
- **(WavePad) (O/S Android)**

Using Audio Editing programs; you can make the appropriate manipulation to audio files like:

- Delete a portion of an audio file.
- Cut a portion of an audio waveform, and paste it in another location on the waveform in the same file or into another sound file.
- Duplicate a portion of the audio waveform (clip).
- Add another audio file into the current audio file.



• Add effects to specific clips or to the whole audio file like: amplify or reduce the sound volume.

Topic Six: Creating and Editing videos

Video files formats

There are different video file formats like: avi, wmv, gp , mp4.

3gp extension:

3gp video format produces a small file size of low quality; it is appropriate for mobile cameras and applicable with mobiles phones 'operating systems.

Avi extension:

Avi video format produces a large file size of high quality compared with other formats; Avi video format is appropriate to computers and video cameras.

Mp4 extension:

Mp4 video format produces average file size of high quality compared with 3gp extension; it is appropriate for Mp4 devices

In VB.net language, you can insert the appropriate controls in the (Toolbox) to run different types of video files.

Video Editing software

There is much video editing software available through the Internet that can be accessed from the following links:

- Kdenlive (O/S Linux)
- Video Maker (O/S Android)
- Movie Maker (O/S Windows)

First: importing files

1. Import images files:
Import image files for the most important “attractions in Egypt“ from the sub folder *"Pictures"* under the main folder *"Atlas"*

2. Import the audio file:
Import the sound file of "attractions in Egypt" from the sub folder "Anthem" under the main folder "Atlas".

Second: Modify video clips (Add effects – writing texts).

1. To set an effect on the image:
Choose an effect and put it over one of the images in the *Time Line*, and then preview the image after adding the affect.

2- To set an effect on transitions between images clips:
Choose one of the effects and then place it between the video clips in the video Time line

3- To put Titles or Texts to different video clips:
Type the title of the video "Attractions in Egypt", this title appears in the *Time line* bar.

Third: Saving video clips in a file:

To save the video file on your computer:
-Locate the storage device.
-Save the file with the filename " مصر" in the sub folder *"Videos"* under the main folder *"Atlas".*
-Follow the rest of the saving steps that ends with displaying the video.

Topic seven: Establish Project's interface and, set Project's properties

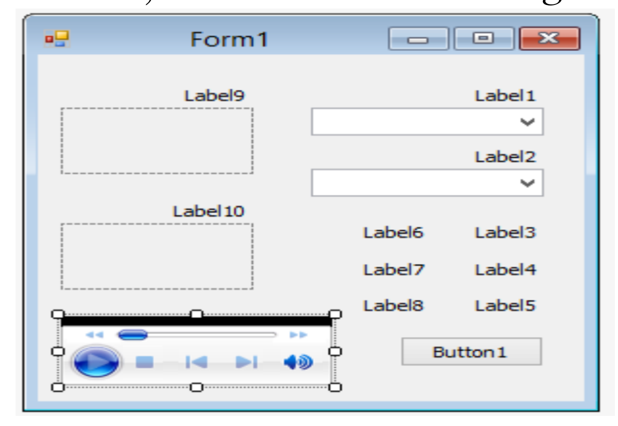
الأطلس العربي الإلكتروني
خريطة الدولة
القارة
الدولة
العاصمة Label6
أهم الموانى Label7
من مصادر المياه Label8
علم الدولة
إيقاف تشغيل السلام الوطني



Create and design an interface for "(Electronic Arabic Atlas)" program.

To create and design an interface; follow the next steps:

- Open Visual Studio. net .
- Create a new project named"*(Electronic Arabic Atlas)*" program .
- Set the Controls, as shown in the shown figure:



On window form Form1; 10 Label controls and 2 ComboBox controls, 2 PictureBox controls and 1 Button control and 1 WindowsMediaPlayer are placed .



Adjust the property Name of some of the Controls displayed on Form1 window , as shown in the following table:

Name	Control
cmbbxContinent	ComboBox1
cmbbxState	ComboBox2
picbxMap	PictureBox1
picbxFlag	PictureBox2
lblDC	Label6
lblPorts	Label7
lblWR	Label8
btnStop_play	Button1
WMPlayer	AxWindowsMediaPlayer1

Note

The control AxWindowsMediaPlayer does not exist in the (Toolbox); it will be combined to this (Toolbox) as described in the steps below:

- Right Click using the mouse in the Toolbox and select (Choose Items).
- A dialog box appears displaying much tabulation.
- Select (com components) tabulation; then choose (Windows Media Player); and to close press (OK); this tool will be added to the (Toolbox).

To Set up a project; you should:

(1) Determine the purpose of the project.

(2) Collect and organize data for the project ;the same thing you did to collect data for "(Electronic Arabic Atlas)", where you created folders as follows : (Data from each country — the Flag of each country – A Video for "Tourist Attractions in Egypt" – An Anthem for each country – the Map of each country ....)

(3) Design the User Interface of the project GUI.





(4) Select the controls that you want to use in the user interface (on the window form).

(5) Set the properties of the controls, such as:

Specify the controls that appear on the User Interface (window form), using the code:

Object.Visible = True

Specify the other controls which does not appear on the User Interface (window form), using the code:

Object.Visible = False

Adjust the SizeMode property of the PictureBox control, using the code:

Picbxmap.SizeMode = StretchImage

Topic eight: Reading data from an Excel sheet using Visual Basic.net



While writing program code in Visual Studio.NET, you will use certain terms and apply the main concepts that you studied last year.

- **ADO (ActiveX Data Object):**

It is an advanced technology that can be used to design "Controls" not as ordinary tools; but "Controls" that get access to databases over appropriate applications and develop applications and Programming Projects i.e (Windows Applications and Web Application) that manipulate data from a diversity of databases. Where; ADO.NET is a set of classes that provides access to multiple data sources; such as "Microsoft SQL Server, Microsoft Access, and Oracle ". This software's can create/manipulate databases; ADO.NET is a part of the Framework.

- **Class:**

A (Class) is the blueprint/ plan / template, from which the individual objects, are created. It is the blueprint that describes the details which any object takes (its Properties, Methods and, Events); and are derived from the (Class).

- **Object:**

An Object is characterized by:

1- The properties that describe and specify an Object.

2- The events that occur on an Object.

3- The methods or actions that an object can perform; upon the occurrence of a particular event.

An (Object) is the basic constructive element in Object Oriented Programming; it is created from a defined class. Thus an (Object) exists only after a certain (Class) has been created.

- **Namespace:**

A Namespace contains a set of related classes that can be used when needed.

- **Framework:** Is the platform for Visual Studio. NET applications that :

1- Enables developers to create applications like (Desktop applications , Web applications and Mobile applications).
2- Provides a development environment for running all applications.

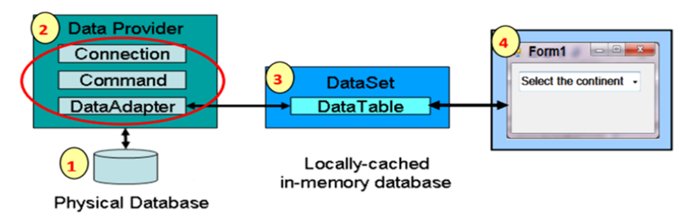
- **The Framework is composed of :**

1- The execution engine (CLR) Common Language Runtime.
2- The .NET class libraries (System Class Libraries).
3- (Compilers).
4- Other elements.

- **SQL (Structured Query Language) :**

It is a programming language designed for managing database files.

The following figures demonstrate the stages for retrieving data from a database saved in a storage medium, and converting it to a data table in the memory, and then display it in the appropriate object located on the interface window Form in Visual Basic.Net language.



<u>Data Source:</u> The source of data (A file located in a storage media or a table stored in the memory).
<u>Provider:</u> It is a link between the database and Visual basic. Each Database program has its own Data Provider (Connection, Command and, DataAdaptor).

<u>Dataset:</u> It is a Class from where we can create a variable: ds. This variable in the computer's memory represents database tables (Data Tables), which was brought from the data file into memory.
<u>DataTable:</u> We can create a variable out of this class: dt. This variable in the computer's memory represents a table for saving data (Data Table), which was brought from the data file.

Examples of select statement If you have a spreadsheet as follows:

Select: It is one of the SQL statements used to retrieve records from a table or from multiple tables in the database.

<u>Example No 1:</u>
Find the sum of the two numbers 8 and 10 using the Select statement.
Syntax: Select No1 + No2
Statement: Select 8 + 10
Output: 18

<u>Example No 2:</u>
Retrieve all records from a spreadsheet Table1 using the Select statement.
Syntax: Select * from TableName
Statement: Select * from Table1

<u>Example No 3:</u>
Show the "Continent" column from the data table Table1 using the Select Statement.
Syntax: Select FieldName from TableName
Statement: Select القارة from Table1

<u>Example No 4:</u>
Show the"Continent" column from the data table Table1 "without repetition using the Select Statement.
Syntax: Select Distinct FieldName from TableName
Statement: Select Distinct القارة from Table1

<u>Example No 5:</u>
Write the Select Statement required; displaying only the countries in " أسيا " continent from Table1.



Syntax:
Select FieldName from TableName Where Condition
Or:
Select [FieldName] from TableName Where Condition
Statement:
Select الدولة from Table1 Where أسيا = 'القارة '
Or:
Select [الدولة]from Table1 Where [أسيا] = 'القارة'

Note:
When using the Where Condition the value assigned to string constant is placed between quotations ' '.

Example No 6:
Write the Select Statement required; to retrieve the column " أهم الموانى "from the data table Table1.
Syntax :Select FieldName from TableName
Statement: Select [من أهم الموانى] from Tabel 1

Example No 7:
Write the Select Statement required; to retreive the two fields "الدولة "and "العاصمة "from the data table Table1.
Syntax Select [FieldName1], [FieldName2] from TableName
Statement Select [الدولة] ، [العاصمة]from Table1

Example No 8:
Write the Select Statement required; to get the number of countries from the data table Table1.
Syntax Select Function (*) from TableName
Statement Select Count (*) from Table1
Output: 10

Example No 9:
Write the Select Statement required; to get the number of countries in "أفريقيا " from the data table Table1.
Syntax Select Function (FieldName) from TableName.
Statement Select Count (الدولة)from Table1 Where أفريقيا = 'القارة '
Output: 5

```
Function GetDatafromExcelSheet(FilePath As String, sql As String) As DataTable

End Function
```

How many operands are assigned to this function?
This function has 2 operands:

- ♣ "FilePath" that represents a path Excel file.
- ♣ "Sql" that represents a sentence through which we will inquire about the data from the Excel file.

This function returns a value of type DataTable inside the computer memory; that represents the data brought from Excel file.

♣ Declare the following variables:

- The Variable "**MyConnection**" that allows opening a channel of communication in the worksheet that holds data in an Excel file.
- The Variable "**MyCommand**" will perform a query by which you can get the data from an Excel file.
- The Variable "**da**" will transfer data from an Excel file to the data Table of Variable "dt".
- The Variable "**dt**" has a table for saving the data brought from the Excel file.

ComboBox control maintains two values: one of them is a shown value that is kept inside DisplayMember property and the other vaue is not shown; it's kept inside ValueMember property.



كيفية طباعة صفحات معينة من ملف معين

مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9



خطوة 1

خطوة 2 اختيار اسم الطابعة بتاعتك

خطوة 3 كتابة الصفحات المراد طباعتها نكتب رقم 4 ثم نكتب الشرطة دي – ثم نكتب 9

خطوة 4 اختيار نوع الورق

خطوة 5 اختيار A4

خطوة 6

المراجعة رقم (2)







Futures Schools  **1st Secondary**

(Computer Department) **2021– 2022**

Mid-Year Revision Sheet

1. You can get the data required to solve any problem through the stage of identifying inputs. ✓
2. The stage "test and debug the program errors" in the problem- solving stages is to write a program (Coding) using one of the computer languages. **X**
3. After setting a plan for solving a problem; you can define the problem. **X**
4. The program documentation is the final stage in the problem- solving stages. ✓
5. Data related to a specific project are collected after creating this project. **X**
6. Electronic encyclopedias are considered one of the search engines on the Internet. **X**
7. It is better to name folders with names suitable for the content of its files and folders. ✓
8. The site www.google.com is one of the search engines for searching information through the Internet. ✓
9. Encyclopedias are considered a special kind of references that provide the most important information and facts related to various human knowledge or part of it. ✓
10. A File consists of a group of Files and Folders. **X**
11. Spreadsheets program can be used to create a database. ✓
12. The column in a database represents one record. **X**
13. In Spreadsheets program, a Data Table is made up of a group of rows and columns. ✓
14. The Spreadsheets programs can be used to collect and organize data for use. ✓
15. The workbook can be saved and considered a database file. ✓
16. The picture of type .gif is characterized by its greater number of colors and sharpness than the .jpg type. **X**
17. You can use an image editing software to delete part of a sound file. **X** 18. When creating Web sites, it is better to use .bmp images. **X**

18.You can add effects on pictures’ sections; using Graphic design programs (ready-made applications). ✓

19.The image of type .wmf has small size compared to the .bmp type. ✓

20. You can apply audio effects on specific clips such as amplify or reduce the sound. ✓
21. You can use one of the audio editor software to modify the dimensions of the images. **X**
22. The size of the audio file type .wav is smaller than the type .mp3. **X**
23. You can use one of the audio editor software to duplicate a portion of the (clip) inside the audio file. ✓
24. You can use one of the audio editor software to delete a portion of the (clip) of the audio file. **X**
25. Searching the Internet; Video files can be obtained of formats: .wmf, .wmv ,.mp3. **X**
26. You can use MS Paint to modify sound files and video files. **X**
27. File video .3gp is characterized by its high quality and small size. **X**
28. You can use the Internet and mobile phones to collect videos files used for making projects. ✓
29. Elements can be placed inside the control (ComboBox) through the property "*Items* ". ✓
30. Use the control (ComboBox) to choose only one item from the list. ✓
31. Visual basic.net language allows adding new Controls to the (Toolbox) controls. ✓
32. You can use (Windows Media Player) program to run text files. **X**
33. The user can insert animated pictures using the control (PictureBox); thus, it appears animated after the execution. ✓
34. You can add effects and text to any picture. ✓
35. The windows movie maker program is the only program in the processing of video files **X**
36. You can save video clips by selecting finish movie. ✓
37. We used the function (getdatafrom) excel sheet to fill the menu by data. ✓
38. You cannot cut a part of the picture, but you can copy a part of it. **X**
39. The meaning of adjust the size of the picture is to change the dimensions in terms of width and height. ✓
40. You must active the folder before renaming it. ✓
41. Always you can change picture size by click and drag on the on of picture border. **X**
42. Modifying the picture size, changing the storage space to picture file. **X**
43. Arabic Atlas is a book contains a collection of maps of countries and continents. ✓

44. Identifying the software is one of the problem-solving stages. **X**

45. Operating system manages the files and folders stored in storage units. ✓

46. Google search engine is the famous search engines. ✓

47. You can use the internet to download (audio and image and video) files. ✓

48. You can’t make a database through spread sheets. **X**

49. Picture files with the extension JPG enables you to deal with 16 million color. ✓

50. You can’t add effects and text to any picture. **X**

51. To save the video clips within a file select finish Movie. ✓

52. You can save video clips by selecting Finish Movie. ✓

53. To fill the determined space by a suitable color, we used Fill color tool. ✓

54. You can cut a part of the picture, but we can’t copy a part of it. **X**

55. The meaning of adjust the size of the picture is to change the height only. **X**

56. You can get data and information through the Internet or other devices used for this, and you can also display and handle this data. ✓

57. Define the problem, required output and available inputs as an overview. ✓

58. The outputs are the important information and results obtained after solving the problem. ✓

59. The Internet provides many services, including the search service, through which we can search for different types of information (digital- audio- text- images) . ✓

60. The number of worksheet columns and rows vary according to Spreadsheet application version. ✓

61. Vector files are characterized by their small storage size; and their type such as eps, emf and wmf. ✓

62. Raster files are characterized by their large storage size; and their type such as raw, bmp, tiff, gif, jpg, png. ✓

63. When you browse the internet websites, you notice many pictures 'types either photos or animated pictures and each of them have its characteristics. ✓

64. All types of pictures fixed except for gif type. It can be fixed and animated pictures. ✓

65.Bmp, jpg , gif , png , wmf are types of pictures that you can use in Visual Basics.net application✓

66.There are many Programs that manipulate different types of pictures according to its kind and its potentiality. Some programs enable you to convert from a picture type to another.✓

67.The picture file type “bmp” can be used with many operating systems. ✓

68.There are many audio files formats (extensions) such as: wav, wma, mp3. ✓

69.In VB.net language, you can insert the appropriate controls in the (Toolbox) to play different types of Audio files. ✓

70.There are different video file formats like: avi, wmv, gp , mp4. ✓

71.The picture of type raw can’t support the animated picture and its transparency. ✓

72.WAV files is not common to be published or posted on Web sites. ✓

73.Various audio editing software can support editing and manipulating MP3 file format. ✓

74.To add effects to the picture, select view video effects from edit movie. ✓

75.There is (Ax windowsMediaPlayer) tool within the toolbox. **X**

76.You can open a link between the Arabic Atlas program and the Excel file. ✓

77.Arab Atlas program is the only program to display maps of the world and to carry out the information for all countries. **X**

78.Problem definition is the first stage of the problem-solving stages. ✓

79.You can search for information using keywords. ✓

80.Yahoo website is one of the search engines. ✓

Q2- Choose the correct answer of the following:

1. The stage…………… is considered the first stage of the problem-solving stages.

   (A) Identify the problem (B) the program documentation.

   (C) Coding the program (D) test and debug the program errors

2. The stage which precedes writing program code is ....

   (A) Identify the inputs. (B) determine the outputs.

   (C) Problem definition. **(D) develop an (Algorithm).**

3. Transferring (problem solving steps) into an application using one of the programing languages is called …………. Stage.

   (A) Determine the output (**B) Coding the program using a computer**

   (C) Documentation of the program or project (D) Develop an Algorithm

1. A single folder may contain ....

   (A) multiple files. (B) several folders

   (C) empty folders. **(D) all of the above**

2. The following Internet sites are considered one of Search Engines except….

   (A) **www.twitter.com.** (B) www.google.com

   (C) www.yahoo.com. (D) www.Altavista.com

3. Electronic encyclopedias are characterized by ....

   (A)Fast and easy search for information.

   (B)The diversity and enormousness of the forms of information

   (C) Lack of information inside them. **(D) Both (A) and (B)**

4. You can insert different types of image files using the control (PictureBox) except the file type:

   a-.Raw b-.bmp c-.jpg d-.gif

4. Image files take the extension

   a-.wmf b-.bmp c-.jpg **d-all of the above**

5. Animated picture files take the extension:

   a-. jpg **b-. gif** c-. png d-. wmf

6. The following extensions are types of audio files; except:

   a-.wav b-.mp3 c-.**png** d-.wma

7. The smaller in size audio file is:

   a- Filename.wav b- **Filename. mp3** c- Filename. wma

8. The following are extensions of video files except the extension:

   a-. mp4 b-. wmv c-. **png** d-.3gp

9. The Highest quality of video file is:

   a-. Filename.3gp b-. Filename.mp4 c-. **Filename.wmv**

10. The smaller video file is:

a Filename.mgp b-. -. **Filename.3gp** c-. Filename.mp4

11.The result of a calculation can be displayed in the control *Label*, it is preferably that the value of the property Name is:

a- Label1 b- Name **c- lblResult** d- MyName

12.The most suitable control that can be used to display a list of names are:

a- Button b- PictureBox c- Label **d- ComboBox**

13.The following controls are used to display images except:

a- ComboBox b- Label **c- PictureBox** d- Button

14.The control used to play sound and video files are:

a- RadioButton b- **WindowsMediaPlayer** c-ComboBox d- PictureBox

15.The control used to display a list of items through it is:

a- PictureBox b- **ComboBox** c- Button d- Label

16.................... one of the applications designed to collect data in an arranged way

(**spread sheet** – word processing – paint program)

18. The types of data they contained in table cells is ....

(Text – Number – **All**)

19.Programs enables the user to create and modify pictures is ....

(picture editing programs-modification picture programs – **all**)

20.Extensions of picture files is ....

(PDF-GIF-**All**)

21.Type of picture files, you can deal with 256 colors only be with the extension.............

(**GIF** –JPG-PCX)

22.To put an effect on the transitions between pictures clips, select view video transition from ....

(Accessories-Time line -**Edit movie**)

23.We open sound Recorder program from .... menu

(Edit movie-**Accessories**- time line)

24. To save the video clips within a file select ....

(**finish movie** – edit movie – view movie)

25. We can import picture files by selecting ....

(**import pictures** – save pictures – Expot picture)

26. Its preferred to save the files names of countries flags pictures in ....folder

(maps – **flags** – pictures)

27. You can search for Information using ....

(**keywords** – pcx- JPG)

28. Picture files with the extension ....enables you to deal with 16 million colors (pcx- Gif - **JPG)**

29.The last stage of the problem-solving stages is ....

(**documentation**-Algorithm-outputs)

30..................... is a group of a static pictures that inserted one after the other in frames in the same timeline

(**Animated pictures** – Sound recording – Data Adapter)

Q3- Complete the following sentences using these words:

Sound - Search engine – Documentation - Creating Folders - Arabic atlas – Search – Encyclopedia

1- **Encyclopedia** is the organized summary of human knowledge in a particular field and arranged in a way to facilitate the search process.
2- **Search engine** is used search for information through the internet.
3- **Search** is one of the internet services.
4- **Creating Folders** is one of the operations carried by the operating system.
5- **Documentation** is one of the problem-solving stages.
6- The audio commentary that related to some parts of the **Sound** data .
7- **Arabic atlas** is a set of geographic maps or is a way to explore the world through the presentation of a set of maps of continents and countries .

Q4- complete the following sentences using these words :

(Fill color tool – gradient – animated picture – GIF-start recording _ capture video)

1- the suitable extension to save an animated picture is **GIF .**

2- **animated picture** is a group of a static pictures that inserted one after the other in frames auto the same timeline .

3- **gradient** refers to the impact of the Gradient .

4- To fill the determined space by a suitable color , we used **Fill color tool**.

5- To start the process of recording sound , we click on **start recording**.

6- To impact Audio file , select impact Audio or Music from **capture video**.

Q5- complete the following sentences using these words :

Google -Spread sheet – Data Adapter – Sound Recorder - Import picture– Edit Movie – Gif

1- The data converter is called **Data Adapter** .
2- **Spread sheet** on of the applications designed to collect data in an arranged way .
3- **Google** search engine is the famous search engines.
4- We can import picture files by selecting **Import picture**.
5- To put effect on the transitions between pictures clips ,select view video transition from **Edit Movie** .
6- Type of picture files , you can deal with 256 colors 0nly be with the extension **Gif** .
7- **Sound Recorder** program that used to record sound for the project through windows.

Q6- Write the scientific term for the following sentence:

1- Is the organized summary of human knowledge in a particular field and arranged in a way to facilitate the search process.(Encyclopedia)
2- Through it you can search for information through the internet .(Search Engine)
3- A set of geographic maps or is a way to explore the world through the presentation of a set of maps of continents and countries.(Arabic Atlas)

Q7:Write the following sentences after correcting the underline words.

1- You can select the event from **ClassName** menu. **Methods Name**.
2- To deal with the picture, you must have one of the programs that uses to edit and process the **sound**. **Picture**.
3- The tools in the Toolbox window called **Tools.** **Controls**.
4- Movie Makers is one of the programs that uses to edit and process the **pictures.** **Video**
5- To rename the folder , select from the folder shortcut menu the command **New**. **Rename**

Q8: Answer the following questions:

1- Define Atlas:

Is a way to explore the world through a book featuring geographic maps, and related to a specific topic like continents and countries.

2- What are the Advantages of Multimedia in Education?

1-Saving the time and effort for both teacher and learner.
2-Making learning process enjoyable and interesting.
3-Grabbing attention of information presented, which facilitate understanding.
4-Providing a diversity of methods to display information which stimulate audio-visual senses.

3- What are the Multimedia Elements?

1. Data or Information
2. Hardware
3. Software

5- What are problem-solving stages?

1- Problem Definition
2-Determine the outputs
3- Determine the inputs
4- Develop an Algorithm
5-Coding a computer program
6- Program Testing and debugging
7-Program or Project Documentation

6- Define Encyclopedia is a distinct type of reference that shows a structured summary of knowledge in a particular field and arranged in accordance with a certain classification; that facilitates searching of required information such as: alphabetic order.

7- What are the ways to organize information contained in encyclopedias?

1- Sorting by alphabet
2- Sorting by scientific classification or by topics

Define A spreadsheet is a workbook made up of many different worksheets or spreadsheets. A spreadsheet consists of columns and rows; it is made up of cells

8- What are the basic types of data that inserted in the table cells?

1- Text data (letters or texts)
2- Numeric data (numbers
3- Formulas (mathematical formulas)

9- Define Image-editing software are programs that enable a user to create and edit pictures through many tools in a good, easy and fast way

10- Define Vector graphics image are based on mathematical expressions—to represent images in computer graphics; they are not affected by scaling (enlarging or reducing their size) where image scaling doesn't reduce picture quality.

11- Define Raster graphics image is a dot matrix data structure; raster images are affected by scaling (enlarging or reducing their size) where image scaling reduces picture quality.

12- Define An animated picture

is a collection of pictures that you have to insert one after the other in frames, inside a timeline. You adjust the interval between each frame; so that the pictures appear to be moving.

13- **Define Audio editing software** are programs that include a collection of powerful tools to generate sounds, add audio effects, recording, editing and performing other audio processing that enable user to edit and process audio files in a great way, quick and easy.

14- **Define Video editing software**

It is the software that enables the user to create and modify videos (film material) and audio through a variety of tools and effects that help the user in creating and editing videos easily and quickly.

Q9: Complete the following sentences:

1- Data or Information can be **Text**, Image or Picture, **Sound**, Video Clip

2- **Hardware** is the necessary devices used to handle data and information of different types, from these devices the Scanner, Digital recorders and, Digital Camera.

3- **Software** is the set of programs and applications used to handle data and information such as: Movie Maker Program - Sound Recorder program - Windows Media Player program.

4- There are many internet sites that offer search services, called **Search Engines**.

5- There are many famous Search Engines such as **Google** and **yahoo**.

6- A **cell** is the intersection of each row and column.

7- The **columns** headers are identified by alphabet letters.

8- The **rows** headers are identified by numbers.

9- There are many programs that you can use for editing pictures such as CinePaint, **PicsArt**, **Paint.NET.**

10- There are several Types of image files that have different extensions like **Bmp - gif – eps -jpg - pcx – png - wmf - tif** .

11- Some types of pictures that we collect or display using computer divided into **Vector Graphics, Raster Graphics.**

12- There are several programs that can used for creating and editing audio files such as **Audacity**, WavePad.

13- There is video editing software available through the Internet such as **Kdenlive, Video Maker, Movie Maker.**

14- GIF is an abbreviation of **(Graphical Interchange Format)**

15- jpeg is an abbreviation of **(Joint Photographic Experts Group)**

16- png is an abbreviation of **(Portable Network Graphics)**

17- bmp extension is an abbreviation of **(Bitmap).**

18- wmf extension is abbreviation of **(Windows Meta File).**

19- WAV extension is abbreviation of **(Waveform audio)**

20- WMA files stand for **(Windows Media Audio).**

21- When we deal with……. **raw** ……….type, a user has to try to convert it into one of the pictures types because of having a few programs to deal with.

22- The …… **gif** …….type is inadvisable to use it in saving pictures of high number of colors and gradients colors; in order not to be distorted.

23- The ….**gif** ….type is advisable to use it for simple pictures that have few colors and of small sizes.

24- The …. **bmp** ….type is a type of fixed picture files that support neither transparency or animation, but we can deal with it through well-known Operating systems specially Windows.

25- The …. **jpeg** ….type is one of the most famous and widely used types compared with others; we can find it mostly on web pages it has 16 million colors.

26- The ….**png** …type is advisable to use it with pictures that have transparent background even if it has a lot of colors and gradients ones.

27- The …… **wmf** ……type is based on mathematical expressions to represent images ; this type is not affected by scaling.

28- …… **Wave** …… file format is of high quality, and often used to store information about uncompressed raw audio data.

29- …… **MP3** …… file format uses compression which actually save space and make the file smaller, it is not suitable for retaining "first generation" archived files.

30- …… **Wma** …… file format is the higher quality and lower distortions type compared to MP3 file, only few audio editing software and operating systems can support editing and manipulating.

31- …… **3gp** …… video format produces a small file size of low quality; it is appropriate for mobile cameras and applicable with mobiles phones 'operating systems.

Q10: Rearrange the steps to Create Folder:

(3) then select Folder
(1) Right-Clicking with the mouse in free place on the Desktop
(5) a new folder is created with the name you specified.
(2) opens a shortcut menu; from which you choose the command New
(4) then type the name of the folder

Q11: Rearrange the steps to Delete Folder:

(2) display its shortcut menu
(1) Select a folder
(3) choose the command Delete

Q12: Rearrange the steps to Naming Folder:

(4) give a new name to the specified folder
(2) display its shortcut menu
(1) Select a folder

(3) choose the command Rename

Q13- 1) Read the following table, and then fill in the blanks:

أهم موانيها	عاصمتها	اسم الدولة
الأسكندرية وبورسعيد	القاهرة	مصر
جدة	الرياض	السعودية
الدار البيضاء	الرباط	المغرب

The shown table is formed of **4** rows, and **3** columns.

a) Each row represents **Record** and each column represents a field.

b) The following:)اسم الدولة , **عاصمتها, أهم موانيها** are fields in the table.

c) Mention the types of data you can enter in Spreadsheet cells:

a) Text data (letters or texts)

b) Numeric data (numbers)

c) Formulas (mathematical formulas)

Q14-Complete the following table with the appropriate file names listed:

Picture File that supports transparency; is not an animated picture and has larger size	Smaller file	larger file	Animated picture file
Filename.png	Filename.wmf	Filename. Raw	Filename.gif

Filename.png **Filename.wmf** **Filename.raw** **Filename.gif** Filename.doc

Q15- The most popular image file types that can be used in Visual Basic .net applications:

***bmp** *** jpeg** *** png** *** gif**

Good Luck ☺



كيفية طباعة صفحات معينة من ملف معين



مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9

خطوة 1

خطوة 2
اختيار اسم الطابعة بتاعتك

خطوة 3
كتابة الصفحات المراد طباعتها
نكتب رقم 4 ثم نكتب الشرطة دي - ثم نكتب 9

خطوة 4
اختيار نوع الورق

خطوة 5
اختيار A4

خطوة 6